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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,444	10/03/2001	Eiji Hamamoto	04558/056001	9646

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EXAMINER

CHANG, AUDREY Y

ART UNIT PAPER NUMBER

2872

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

EF

<b>Office Action Summary</b>	Application No. 09/970,444	Applicant(s) HAMAMOTO ET AL.	
	Examiner Audrey Y. Chang	Art Unit 2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 January 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-19 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-19 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Remark*

- This Office Action is in response to applicant's amendment filed on January 31, 2005, which has been entered into the file.
- By this amendment, the applicant has canceled claims 1-12, and 20-23.
- Claims 14-19 and 24 remain pending in this application.

### *Allowable Subject Matter*

1. The indicated allowability of claims 13-19 and 24 is withdrawn in view of the newly discovered reference(s) to **Sakamaki et al (PN. 6,746,633)** and **Binda (PN. 2,445,555)**. Rejections based on the newly cited reference(s) follow.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 13-19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Sakamaki et al (PN. 6,746,633) in view of the patent issued to Binda (PN. 2,445,555).**

**Sakamaki et al** teaches a *method* for producing a *polarizing plate* that is comprising the step of *dyeing a polyvinyl alcohol (PVA) film* using a *dichroic iodine*, (please see column 9, line 62 and column 10, lines 12-14), and the *step of stretching* the PVA film, wherein in the step of stretching the PVA film,

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the PVA film is *immersed* in a bath containing *cross-linking agent*, (please see column 10, lines 39-51). Sakamaki et al teaches that the stretching ratio is between 1.1 to 20, (please see column 3, lines 30-35). Sakamaki et al teaches that the produced polarizing plate has single *transmittance* of 43.3% and *degree of polarization* of 99.98% at 550 nm, (please see column 12, lines 20-25). Sakamaki et al teaches that the degree of polarization is determined in terms of the *parallel transmittance* (H0) and the *crossed transmittance* (H1), (please see column 16, lines 26-38). By simple calculation, one can deduce that the ratio of (parallel transmittance) to (crossed transmittance) is about 4999 at 550 nm which is greater than 3000, (with respect to claim 16). And since the single transmittance is always greater than the parallel transmittance, this means the ratio (single transmittance) to (crossed transmittance) must be greater than 4999 at 550 nm and therefore also greater than 3000, (with respect to claims 13 and 24). This means that the produced polarizing plate of Sakamaki et al has the transmittance ratios that satisfy the ratios recited in the claims.

This reference has met all the limitations of the claims. Sakamaki et al teaches that the stretching step of the PVA film is performed by immersing the PVA film in a bath with cross-linking agent. This reference however does not teach explicitly that the PVA film is stretched in two cross-linking baths with the second stretching is performed at a stretching ratio greater than the first stretching. **Binda** in the same field of endeavor teaches a method for producing polarizing plate wherein the PVA film is stretched in a cross-linking bath of a cross-linking agent and after the first stretching the PVA film is then *re-stretched*. Binda teaches that the step of stretching and the step of re-stretching the PVA are taking place in the cross-linking agent baths, (the re-stretching step is considered in the second bath). This re-stretching of PVA film in the cross-link bath makes the PVA film have improved material quality as well as improved transmittance, (please see column 2, lines 40-55, column 3, lines 1-24). With regard to claim 14, Binda teaches that the cross-linking agent is *boric acid*, (please see column 2, lines 20-24). It would then have been obvious to one skilled in the art to apply the teachings of **Binda** to provide additional *re-stretching*

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step of the PVA film for the benefits of materially improving the polarizing plate as well as optimizing the transmittance and therefore the polarization degree of the polarizing plate. Binda teaches that the strength of the re-stretching step is nearly as strong as the first or originally stretching. Binda also teaches that after the first stretching, the film would shrink. Although this reference does not teach explicitly that the second stretching has a stretch ratio greater than the first stretch ratio, such modification would have been obvious to one skilled in the art to adjust the stretch ratio and strength of the re-stretching to achieve the desired the polarizing plate.

With regard to claims 17-19, Sakamaki et al teaches that a luminous corrected Y transmittance of the polarizing plate is 43.3% which is above 42.4% and is more than 43% but not more than 44% when a standard C light source having luminous factor correction per 10 nm in a range from 400 nm to 700 nm is used. Sakamaki et al teaches that the polarization degree is 99.98%.

#### ***Double Patenting***

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

5. Applicant is advised that should claim 13 be found allowable, claim 24 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Both claims 13 and 24 recite the same method steps for forming the polarizing plate, in particular they both claim the stretching is in **two** cross-linking baths with the same stretching ratios specific.

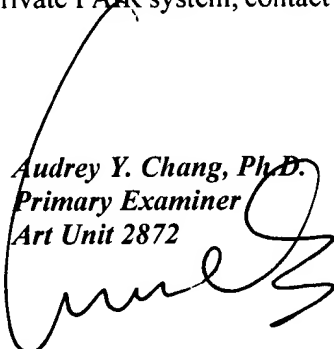
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Audrey Y. Chang whose telephone number is 571-272-2309. The examiner can normally be reached on Monday-Friday (8:00-4:30), alternative Mondays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Audrey Y. Chang, Ph.D.*  
*Primary Examiner*  
*Art Unit 2872*



A. Chang, Ph.D.